

ABSTRACT OF THE DISCLOSURE

A two-part sizing composition that imparts improved resistance to hydrolysis of reinforced composites including a size composition and a binder composition is provided. The size composition may include one or more coupling agents, one or more lubricants, and at least one wetting agent. The binder composition may include a copolymer formed from maleic anhydride and at least one other copolymerizable monomer, at least one crosslinking agent, and a surfactant or mixture of surfactants. In at least one exemplary embodiment, the maleic anhydride copolymer is a maleic anhydride-butadiene copolymer partial ammonium salt. The size composition may be applied to a reinforcing fiber material before the binder size material is applied. The two-part size composition may be applied to a reinforcing fiber material to form a reinforcing fiber product which may then be densified or compacted to form a densified reinforcing fiber product, such as a pellet.